L Number	Hits	Search Text	DB	Time stamp
1	2	6363178.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:27
2	4	(("6363178") or ("6298173")).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:33
3	4	("5457776" | "5703628" | "5880728" | "6005679").PN.	USPAT	2004/05/14 16:27
4	2	6363178.URPN.	USPAT	2004/05/14 16:29
5	27	("4503556" | "4741046" | "4750209" | "4817050" | "4893188" | "5001767" | "5351314" | "5436732" | "5465304" | "5479587" | "5483622" | "5555362" | "5568571" | "5588072" | "5631984" | "5680478" | "5680479" | "5699453" | "5703962" | "5748865" | "5751849" | "5757957" | "5767978" | "5774579" | "5802524" | "5848184" | "5848191").PN.	USPAT	2004/05/14 16:29
6	1	6298173.URPN.	USPAT	2004/05/14 16:32
7	66128	(file or document) with (type or extension)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:35
8	12084	((file or document) with (type or extension)) and (reduc$3 or compress$3) with (file or document)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:36
9	1153	(((file or document) with (type or extension)) and (reduc$3 or compress$3) with (file or document)) and application with (priorit$3 rank$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:37
10	452	((((file or document) with (type or extension)) and (reduc$3 or compress$3) with (file or document)) and application with (priorit$3 rank$3)) and rule	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:37
11	31	((((file or document) with (type or extension)) and (reduc$3 or compress$3) with (file or document)) and application with (priorit$3 rank$3)) and rule with (compress$3 reduc$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:44
12	19310	(storage near4 (capac$4 size)) with (compres$4 reduc$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:03
13	229	((storage near4 (capac$4 size)) with (compres$4 reduc$5)) and (compres$4 reduc$5) with rule	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:03
14	0	(((storage near4 (capac$4 size)) with (compres$4 reduc$5)) and (compres$4 reduc$5) with rule) and insufficent with (space or memory)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:04
15	10	(((storage near4 (capac$4 size)) with (compres$4 reduc$5)) and (compres$4 reduc$5) with rule) and insufficient with (space or memory)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:07

16	1	insufficient with (space or memory storage) with (file or document) with (compress$5 and reduc$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:08
17	21	insufficient with (space or memory storage) with (file or document) with (compress$5 reduc$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:14
18	4	insufficient with (space or memory storage) with (file or document) with (compress$5 reduc$5) and rule	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:14
19	5	insufficient with (space or memory storage) with (file or document) with (compress$5 reduc$5) and (rule$3 criter$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:14

```
Set     Items   Description
S1    3460150   BACKUP? OR BACK?()(UP OR UPS) OR ZIP OR ZIPS OR ZIPPING OR
            ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS? OR PKZIP? OR
             PKUNZIP? OR UNZIP? OR REDUC?
S2     100373   S1(3N)(FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJEC-
            T?)
S3    2629455   RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC?
             OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4    4516155   SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATI-
            ON? OR RESOURCE?
S5     545650   POINTER? OR LINK? OR VIRTUAL()(FILE? OR OBJECT?)
S6      13199   S2 AND S3
S7       6240   S6 AND S4
S8        302   S7 AND S5
S9      63253   S3(2N)(MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VA-
            RIOUS OR VARIET?)
S10        22   S8 AND S9
S11       267   S7 AND S9
S12        32   S11 AND IC=G06F-015?
S13        11   S11 AND IC=G06F-012?
S14        62   S10 OR S12 OR S13
S15        49   S14 AND IC=G06F?
S16        45   S15 NOT AD=20001016:20021016
S17        45   S16 NOT AD=20021016:20040510
File 347:JAPIO Nov 1976-2003/Dec(Updated 040402)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200428
         (c) 2004  Thomson Derwent
```

17/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO

06168640 **Image available**
DATA COMPRESSOR

PUB. NO.: 11-110187 [JP 11110187 A]
PUBLISHED: April 23, 1999 (19990423)
INVENTOR(s): MANBA OSAMU
APPLICANT(s): SHARP CORP
APPL. NO.: 09-264457 [JP 97264457]
FILED: September 29, 1997 (19970929)
INTL CLASS: **G06F-005/00** ; **G06F-017/21** ; H03M-007/40

ABSTRACT

PROBLEM TO BE SOLVED: To **speed** up the retrieval of a dictionary for **data compression** while suppressing the increase of storage capacity, by adding the information of **links** to the nodal points of **plural levels** to the respective nodal points of the dictionary and performing the retrieval of the dictionary while using the added **link** information as well.

SOLUTION: A data line terminating device 21 is provided with a mutual connection circuit 24 with a data terminating device 22, a signal converting part 25 with a public telephone network 23, a control part 26 for internal control, an error correcting part 27 for error correction, and a **data compressing** part 28 for **compressing** /extending **data** . The **data compressing** part 28 is provided with a dictionary 29 in a tree structure, a dictionary retrieving means 30, and a **link** adding means 31. The information of **links** to the nodal points at **plural levels** is added to the respective nodal points of the dictionary 29, and the dictionary 29 is retrieved by the dictionary retrieving means 30 while using the added **link** information as well. When adding input data to the dictionary 29, the **link** adding means 31 adds the information of **links** to the nodal points at the **plural levels** within the predetermined range.

04213040 **Image available**
MULTI-MEDIA DATA BASE DEVICE

PUB. NO.: 05-204740 [JP 5204740 A]
PUBLISHED: August 13, 1993 (19930813)
INVENTOR(s): MASUMOTO RYUICHI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 04-010673 [JP 9210673]
FILED: January 24, 1992 (19920124)
INTL CLASS: [5] **G06F-012/00** ; H04N-001/00; H04N-001/21
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 44.7 (COMMUNICATION -- Facsimile)
JOURNAL: Section: P, Section No. 1649, Vol. 17, No. 634, Pg. 85, November 24, 1993 (19931124)

ABSTRACT

PURPOSE: To shorten communication **time** at the **time** of registering **data** , to **reduce** communication loads, to shorten storage **time** at the **time** of storing data and to save areas required for preserving data.
CONSTITUTION: Data respectively prepared by respective basic data preparing means 301-304 for various media such as audio, image, video, numerical and character or the like are **compressed** by **data compression** means 306-309 for respective media selected by a **data compression** method selecting means 305, transmitted to a host computer by a data communicating means 310 and stored in a multi-media data base 312 on the host computer. Thus, **data** are **compressed** by an optimum compression means corresponding to the data **characteristics** of **various** media.

17/5/7 (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO

04192055 **Image available**
DATA COMPRESSING DEVICE AND **DATA** EXPANDING DEVICE

PUB. NO.: 05-183755 [JP 5183755 A]
PUBLISHED: July 23, 1993 (19930723)
INVENTOR(s): TAKEHARA HIDEKI
SUGAWARA TAKAYUKI
APPLICANT(s): VICTOR CO OF JAPAN LTD [000432] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-360619 [JP 91360619]
FILED: December 27, 1991 (19911227)
INTL CLASS: [5] H04N-001/41; **G06F-015/66** ; H03M-007/30; H04N-007/13
JAPIO CLASS: 44.7 (COMMUNICATION -- Facsimile); 42.4 (ELECTRONICS -- Basic Circuits); 44.6 (COMMUNICATION -- Television); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: E, Section No. 1456, Vol. 17, No. 601, Pg. 99, November 04, 1993 (19931104)

ABSTRACT

PURPOSE: To compress a picture including a halftone with a high compression **rate** and high quality by calculating the run length of intermediate value data which is continuous between specified **levels** so as to make it into a run length code.

CONSTITUTION: Picture data where characters are superimposed is inputted to a pre-processing part 110. The output side of the pre-processing part 110 is connected to the input side of a run length counter 112 and the output side of the run length counter 112 is connected to the input side of a run length encoding part 114. The output side of the run length encoding part 114 is connected to the input side of a Huffman encoding part 116. Here, data of the specified **level** is made into the run length code and only the run length of intermediate value data is made into the run length code and compressed. An intermediate value is interpolatively generated from the run length of intermediate value data with the **plural** specified **levels** as reference so as to be extended. The interpolation can be a gamma interpolation without limiting to a linear interpolation.

17/5/10 (Item 10 from file: 347)
DIALOG(R)File 347:JAPIO

03854718 **Image available**
ADAPTIVE **DATA COMPRESSION** SYSTEM

PUB. NO.: 04-219818 [JP 4219818 A]
PUBLISHED: August 10, 1992 (19920810)
INVENTOR(s): OKAMURA TOSHIHIKO
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-418912 [JP 90418912]
FILED: December 19, 1990 (19901219)
INTL CLASS: [5] **G06F-005/00 ; G06F-015/20**
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 1458, Vol. 16, No. 568, Pg. 114, December 09, 1992 (19921209)

ABSTRACT

PURPOSE: To use the tree structure of a dictionary to realize LRU(least recently used) deletion heuristics and to offer the adaptive **data compression** system which flexibly handles data having **various characteristics** .

CONSTITUTION: The dictionary 2 wherein reference numbers are given to part series of an input series is generated and when the same part series appears again, its reference number is outputted to register the extended series of the part series in the dictionary 2. At this **time** , the maximum value of the number of part series registered in the dictionary 2 is set previously and when the dictionary 2 becomes full, older part series are deleted by using the tree structure of the dictionary 2 to register new part series in obtained spaces.

03577273 **Image available**
IMAGE **DATA** **COMPRESSING** SYSTEM

PUB. NO.: 03-240173 [JP 3240173 A]
PUBLISHED: October 25, 1991 (19911025)
INVENTOR(s): NAKANO YASUHIKO
YOSHIDA SHIGERU
OKADA YOSHIYUKI
CHIBA HIROTAKA
APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-035583 [JP 9035583]
FILED: February 16, 1990 (19900216)
INTL CLASS: [5] **G06F-015/66** ; H04N-001/413
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 44.7 (COMMUNICATION -- Facsimile)
JOURNAL: Section: P, Section No. 1302, Vol. 16, No. 28, Pg. 110, January 23, 1992 (19920123)

ABSTRACT

PURPOSE: To attain a high compression ratio by applying the pre-processing to the image data having **different** statistic **characteristics** and converting the pre-processed image data into a data train that can be easily compressed with a bias based on the transition probability of the pre-processed intermediate data.

CONSTITUTION: A pre-processing means 10 is provided together with an intermediate code conversion means 12, and a compressing/coding means 14. The pre-processing is applied so that plural vertical lines of the image data are collectively converted into the intermediate codes of the fixed length consisting of a set of a bit pattern and the pattern **duration** . Then a histogram is produced for the emerging frequency of the pattern transition produced between the contiguous codes of an intermediate code train. Then only the intermediate code having a transition pattern easily produced is replaced with a specific pattern, and the intermediate codes having the transition patterns not easily produced are outputted as they are. Finally a converted code train to be coded at the present **time** point is compressed and coded by the means 14 as a reproduction obtained from a converted code train already coded. Thus it is possible to effectively **compress** the **data** despite the mixture of image data having **different** statistic **characteristics** . Then the **data** quantity can be **reduced**

17/5/19 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015291397 **Image available**
WPI Acc No: 2003-352330/200333
XRPX Acc No: N03-281379

Data storage method for enterprise, involves summarizing previously summarized data structures into coarser data structures, where degree of coarseness of summarized data structures increase with age of raw data points

Patent Assignee: BMC SOFTWARE INC (BMCS-N)
Inventor: AGRAWAL S; HAFEZ A; ROCCO J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6513065	B1	20030128	US 99262194	A	19990304	200333	B

Priority Applications (No Type Date): US 99262194 A 19990304
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6513065	B1		31	G06F-015/173	

Abstract (Basic): US 6513065 B1

NOVELTY - The raw data points comprising measurements of one or more computer system **resources** , are summarized into summarized data structures which are further summarized into coarser data structures. The above process is repeated, as new raw data points are received, to create further coarser summarized data structures. The degree of coarseness of the summarized data structures increase with the age of the raw data points.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) system for storing data regarding one or more computer systems in enterprise; and

(2) memory medium storing data storage program.

USE - For storing data regarding one or more computer systems that are connected to network such as LAN and WAN in enterprise.

ADVANTAGE - By providing **multiple levels** of summaries, where the data becomes coarser in granularity, the **file** size is **reduced** . Also the process state changes are preserved at each **level** of summarization, hence the record of a particular process is never totally lost.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram illustrating the summarization with three **levels** of granularity.

pp; 31 DwgNo 12/16

Title Terms: DATA; STORAGE; METHOD; SUMMARY; DATA; STRUCTURE; COARSE; DATA; STRUCTURE; DEGREE; COARSE; DATA; STRUCTURE; INCREASE; AGE; RAW; DATA; POINT
Derwent Class: T01; U14
International Patent Class (Main): **G06F-015/173**
File Segment: EPI

17/5/24 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013254606 **Image available**
WPI Acc No: 2000-426489/200037
XRPX Acc No: N00-318116
Data back - up **procedure for** backing up data **of** file **involves setting common priority** level **to** several **files simultaneously and searching and** backing up files **with common priority** level
Patent Assignee: NIPPON DENKI ENG KK (NIDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2000148562	A	20000530	JP 98327566	A	19981118	200037	B

Priority Applications (No Type Date): JP 98327566 A 19981118
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000148562	A		9	G06F-012/00	

Abstract (Basic): JP 2000148562 A
NOVELTY - The common priority **level** is set to several files simultaneously and the files that have the common priority **level** are searched and backed up in a priority- **level** setting process. The **back - up** of the duplicate **file** is prevented in a back-up process.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(a) a **data back - up** apparatus using the **data back - up** procedure;
(b) and a computer-readable recording medium in which a **data back - up** program is recorded.
USE - For **backing up data** of **file** to which priority **level** is added.
ADVANTAGE - Allows common priority **level** to be set for several files simultaneously, thus improving input operation. Shortens back-up processing **time** and reduces required back-up capacity since **back - up** of duplicate **file** is prevented.
DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of the **back - up** process in the **data back - up** procedure.
pp; 9 DwgNo 1/5
Title Terms: DATA; BACK-UP; PROCEDURE; BACKING; UP; DATA; FILE; SET; COMMON ; PRIORITY; **LEVEL** ; FILE; SIMULTANEOUS; SEARCH; BACKING; UP; FILE; COMMON; PRIORITY; **LEVEL**
Derwent Class: T01
International Patent Class (Main): **G06F-012/00**
International Patent Class (Additional): **G06F-012/16**
File Segment: EPI

17/5/28 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012511721 **Image available**
WPI Acc No: 1999-317827/199927
XRPX Acc No: N99-238049

Data **communication** compression **apparatus for portable** information **terminal e.g. PC - adds** link **information corresponding to node of** different levels **in predetermined range during amendment of input data to dictionary**

Patent Assignee: SHARP KK (SHAF)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 11110187	A	19990423	JP 97264457	A	19970929	199927	B

Priority Applications (No Type Date): JP 97264457 A 19970929
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11110187	A		10	G06F-005/00	

Abstract (Basic): JP 11110187 A

NOVELTY - **Link** information is added on node of **different levels** to each node of a dictionary. A dictionary search unit (30) uses added **link** information to search the dictionary. An addition unit (31) adds **link** information corresponding to node of **different level** in a predetermined range, during amendment of input data to the dictionary. DETAILED DESCRIPTION - Encoding of a partial row of an input data is performed by searching a dictionary (29) which has a tree structure having **link** information and existence information for every node.

USE - In portable information terminal e.g. PC, work station in public telephone network.

ADVANTAGE - Improves **speed** of calculating unit. Suppresses increase in power consumption and memory capacity of dictionary. Performs data communication easily with high transmission **rate** .

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of one form of **data compression** apparatus. (29) Dictionary; (30) Dictionary search unit; (31) Addition unit.

Dwg.1/7

Title Terms: DATA; COMMUNICATE; COMPRESS; APPARATUS; PORTABLE; INFORMATION; TERMINAL; ADD; **LINK** ; INFORMATION; CORRESPOND; NODE; **LEVEL** ; PREDETERMINED; RANGE; AMEND; INPUT; DATA; DICTIONARY
Derwent Class: T01; U21
International Patent Class (Main): **G06F-005/00**
International Patent Class (Additional): **G06F-017/21** ; H03M-007/40
File Segment: EPI

17/5/34 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009306527 **Image available**
WPI Acc No: 1992-433936/199252
Related WPI Acc No: 1997-086981
XRPX Acc No: N92-331142

Multiple level data compression for storage or transmission - connects processors with associated memory in series such that output of one processor is input to next processor to analyse serially input data

Patent Assignee: TRIADA LTD (TRIA-N)
Inventor: BUGAJSKI J M; RUSSO J T
Number of Countries: 018 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9222141	A1	19921210	WO 92US3932	A	19920511	199252	B
US 5245337	A	19930914	US 91706949	A	19910529	199338	
US 5293164	A	19940308	US 91706949	A	19910529	199410	
			US 92978360	A	19921118		
EP 588921	A1	19940330	EP 92913110	A	19920511	199413	
			WO 92US3932	A	19920511		
JP 6508456	W	19940922	WO 92US3932	A	19920511	199442	
			JP 93500423	A	19920511		
EP 588921	A4	19950419	EP 92913110	A		199613	
JP 3217781	B2	20011015	WO 92US3932	A	19920511	200167	
			JP 93500423	A	19920511		

Priority Applications (No Type Date): US 91706949 A 19910529; US 92978360 A 19921118
Cited Patents: 01Jnl.Ref; US 4064489; US 5006849; WO 8809586
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9222141	A1	E	33	H03M-007/30	
Designated States (National): CA JP					
Designated States (Regional): BE CH DE DK ES FR GB GR IT LI LU MC NL SE					
US 5245337	A		8	H03M-007/30	
US 5293164	A		9	H03M-007/30	Cont of application US 91706949 Cont of patent US 5245337
EP 588921	A1	E	33	H03M-007/30	Based on patent WO 9222141
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU MC NL SE					
JP 6508456	W			G06F-005/00	Based on patent WO 9222141
EP 588921	A4			H03M-007/30	
JP 3217781	B2		19	G06F-005/00	Previous Publ. patent JP 6508456 Based on patent WO 9222141

Abstract (Basic): WO 9222141 A

The appts. comprises a number of sequentially ordered memory **levels** (24a to 24n), and a number of processors (20a to 20n), each associated with a memory **level** . The processor associated with the first memory **level** receives the incoming data stream, and analyses the stream to detect the occurrence of previously non-occurring sequences of data elements in the stream. The sequences are stored in the first memory **level** , and signals are output representative of the storage location in the first **level** of each sequence of data elements in the incoming stream.

The processor associated with each sequential memory **level** receives output signals from the processor associated with the sequentially lower **level** , detects and stores in its **level** previously non occurring sequences of data elements and outputs to the processor associated with the next higher **level** signal representative of the storage location of its associated memory **level** of each sequence of data elements in its incoming signal.

ADVANTAGE - Each processor provides single storage location output signal for each input pair of elements and maintains count of occurrences of each pair.

```
Set     Items   Description
S1    3059835   BACKUP? OR CODEC? ? OR BACK?()(UP OR UPS) OR ZIP OR ZIPS OR
            ZIPPING OR ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS?
           OR PKZIP? OR PKUNZIP? OR UNZIP? OR REDUC?
S2     180573   S1(3N)(FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJEC-
           T?)
S3    5277904   RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC?
            OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4    8381563   SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATI-
           ON?
S5    1223079   POINTER? OR LINK? OR VIRTUAL()(FILE? OR OBJECT?)
S6     133631   S3(2N)(MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VA-
           RIOUS OR VARIET?)
S7    4452712   SPACE? OR MEMOR? OR ROM OR MEGABYT? OR RAM OR STORAGE? OR -
           RESOURCE?
S8     111490   S4(2N)(CALCULAT? OR ESTIMAT? OR PREDICT? OR FORECAST? OR A-
           LGORITHM? OR FORMULA?)
S9          0   S2(10N)S6(10N)S8
S10       637   S2(S)S6
S11       504   S2(S)S8
S12         2   S10(S)S11
S13       143   S11(S)S7
S14       200   S10(S)S7
S15       140   S2(10N)(S6 OR S8)(10N)S7
S16        46   S2(5N)(S6 OR S8)(5N)S7
S17        48   S16 OR S12
S18        34   RD (unique items)
S19        29   S18 NOT PY>2000
S20        29   S19 NOT PD=20001016:20021016
S21        29   S20 NOT PD=20021016:20040505
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2004/May 07
         (c) 2004 The Gale Group
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 674:Computer News Fulltext 1989-2004/May W1
         (c) 2004 IDG Communications
File 275:Gale Group Computer DB(TM) 1983-2004/May 10
         (c) 2004 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2004/May 10
         (c)2004 The Gale Group
File   9:Business & Industry(R) Jul/1994-2004/May 07
         (c) 2004  The Gale Group
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
```

21/3,K/2 (Item 2 from File: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01406929 Supplier Number: 46559116 (USE FORMAT 7 FOR FULLTEXT)
Premenos Acquires Financial Transaction Security Software Company; Expands Electronic Commerce Security Products to Banking and Financial Industries.
Business Wire, p07220009
July 22, 1996
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 891

... costs of EDI and many other file types and transactions using state-of-the-art **compression algorithms** . **File** transfer **times** and **storage** amounts are typically **reduced** 50 to 80 percent. It may be integrated into any applications level program and is...

21/3,K/9 (Item 4 from File: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01709008 SUPPLIER NUMBER: 16173301 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Using smart systems to save the environment. (includes bibliography)
Markowitz, Judith
AI Expert, v9, n11, p32(7)
Nov, 1994
ISSN: 0888-3785 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2777 LINE COUNT: 00253

... be handled. The TWC system flags all incompatibilities and substances requiring special treatment. It also **calculates** **timetables** and **backup** **storage** requirements. TWC staff who evaluate and prepare hazardous waste **storage** and processing permits view the KBS as an effective, time-saving tool.

[CHART OMITTED]

One...

21/3,K/28 (Item 1 from file: 810)
DIALOG(R)File 810:Business Wire

0604687 BW0125

STORAGE TECHNOLOGY: Queensland, Australia, data center project targets million-dollar oil exploration markets; StorageTek PowderHorn, RedWood, TimberLine provide up to 300 terabytes of storage for seismic data

July 17, 1996

Byline: Business Editors

...technologies as they become available, transparently supporting access to data on both new and old **storage** systems. It also needed to provide **multiple levels** of data **storage** to allow a range of lower-cost **storage** and to **back up** meta **files**."

The system runs the Petrovision databank application from the British company PECC. Development of Petrovision...

```
Set     Items   Description
S1    4998330   BACKUP? OR CODEC? ? OR BACK?()(UP OR UPS) OR ZIP OR ZIPS OR
               ZIPPING OR ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS?
               OR PKZIP? OR PKUNZIP? OR UNZIP? OR REDUC?
S2     205822   S1(3N)(FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJEC-
               T?)
S3   10627256   RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC?
               OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4   10836751   SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATI-
               ON?
S5    1181393   POINTER? OR LINK? OR VIRTUAL()(FILE? OR OBJECT?)
S6     347034   S3(2N)(MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VA-
               RIOUS OR VARIET?)
S7    4531822   SPACE? OR MEMOR? OR ROM OR MEGABYT? OR RAM OR STORAGE? OR -
               RESOURCE?
S8     428770   S4(2N)(CALCULAT? OR ESTIMAT? OR PREDICT? OR FORECAST? OR A-
               LGORITHM? OR FORMULA?)
S9       1445   S2 AND S3 AND S8
S10        71   S2 AND S6 AND S8
S11        71   S10 AND (S4 OR S5)
S12        60   RD (unique items)
S13        34   S12 NOT PY>200
File   8:Ei Compendex(R) 1970-2004/May W1
         (c) 2004 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2004/Apr
         (c) 2004 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2004/Feb 27
         (c) 2004 EBSCO Publishing
File  65:Inside Conferences 1993-2004/May W2
         (c) 2004 BLDSC all rts. reserv.
File   2:INSPEC 1969-2004/May W1
         (c) 2004 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2004/Apr W3
         (c)2004 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2004/May 10
         (c) 2004 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File   6:NTIS 1964-2004/May W2
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2004/May W1
         (c) 2004 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2004/May W1
         (c) 2004 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Apr
         (c) 2004 The HW Wilson Co.
File  95:TEME-Technology & Management 1989-2004/Apr W3
         (c) 2004 FIZ TECHNIK
```

13/5/10 (Item 5 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

819384 ORDER NO: AAD83-19202
A PARTITIONED DATA COMPRESSION **ALGORITHM**
Author: KURIEN, THOMAS
Degree: PH.D.
Year: 1983
Corporate Source/Institution: THE UNIVERSITY OF CONNECTICUT (0056)
Source: VOLUME 44/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 1197. 167 PAGES
Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL
Descriptor Codes: 0544

This thesis introduces a new approach to the design of estimation algorithms. It is applicable to systems which have a special structure and the measurements involve only subsets of the total state vector.

The approach used is to partition the system into subsystems, each containing subsets of the state associated with a particular measurement type. Reduced-order filters are designed for each of these subsystems. A separate full-order filter interacts with these filters to ensure that they maintain close to unbiased (state and covariance) estimates. This full-order filter, in turn, receives **compressed information** from the **reduced** -order filters. The combination of the full-order filter and reduced-order filters has a smaller computational requirement compared to that of the optimal filter. In fact, a systematic design approach is provided wherein a trade-off between accuracy and computational requirements can be made. Computer simulation of the algorithm for typical systems has verified the predicted performance of the algorithms.

The design approach introduced in this thesis also provides a hierarchical structure in the estimation process whereby information is assimilated at different **rates** at **different levels** . As such the algorithm provides valuable insight for the design of multi-level and multi- **rate estimation algorithms** for systems of large dimension.

13/5/17 (Item 6 from file: 2)
DIALOG(R)File 2:INSPEC

03965097 INSPEC Abstract Number: B91058125, C91057358
Title: Compression and ranking
Author(s): Goldberg, A.V.; Sipser, M.
Author Affiliation: Dept. of Comput. Sci., Stanford Univ., CA, USA
Journal: SIAM Journal on Computing vol.20, no.3 p.524-36
Publication Date: June 1991 Country of Publication: USA
CODEN: SMJCAT ISSN: 0097-5397
Language: English Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: A complexity-theoretic approach to the classical **data compression** problem is presented. A notion of language compressibility is defined, and it is shown that essentially all strings in a sufficiently sparse 'easy' (e.g., polynomial- **time**) language can be compressed efficiently. A notion of ranking as a form of optimal compression is also defined, and it is shown that some 'very easy' languages (e.g., unambiguous context-free languages) can be ranked efficiently. Languages that cannot be compressed or **ranked** efficiently under **various** complexity-theoretic assumptions are exhibited. The notion of compressibility is closely related to Kolmogorov complexity and randomness. This relationship and the complexity-theoretic implications of the results are discussed. (13 Refs)
Subfile: B C
Descriptors: computational complexity; **data compression**
Identifiers: complexity theory; sparse language; polynomial **time algorithm** ; ranking; **data compression** problem; language compressibility ; strings; optimal compression; unambiguous context-free languages; Kolmogorov complexity; randomness
Class Codes: B6140 (Signal processing and detection); C4240 (Programming and algorithm theory); C1260 (Information theory)

13/5/19 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

02213126 INSPEC Abstract Number: A84036509
Title: A test on compression of digital terrain model data
Author(s): Makarovic, B.
Journal: ITC Journal no.2 p.133-8
Publication Date: 1983 Country of Publication: Netherlands
CODEN: ITCJDP ISSN: 0303-2434
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: An outline is presented of a method for **data compression** , including the results of the corresponding experimental tests. The method is suitable for hierarchically structured grid data, and it uses the second difference criterion in each **level** . **Several** variants of the method are outlined. Experimental tests were carried out by means of a Gestallt DTM of mountainous terrain and using a one-dimensional operator. Different thresholds were applied to second differences and the corresponding losses of accuracy and compression **rates** were **estimated** . By adjusting the threshold, both quality indicators can be tuned. The effectiveness of the method depends mainly on the terrain roughness and the magnitude of threshold. (2 Refs)
Subfile: A
Descriptors: cartography; geodesy; geophysical techniques; photogrammetry ; remote sensing
Identifiers: **data compression** ; geodesy; technique; cartography; photogrammetry; digital terrain model; method; **data compression** ; method ; hierarchically structured grid data; second difference criterion
Class Codes: A9110D (Cartography); A9110L (Photogrammetry); A9365 (Data acquisition and storage); A9385 (Instrumentation and techniques for geophysical research)

13/5/23 (Item 4 from file: 6)
DIALOG(R)File 6:NTIS

0902226 NTIS Accession Number: AD-A099 758/5/XAB
Observer Performance Measured against Hybrid Compressed Video Imagery
(Technical rept)
Swistak, J. E.
Army Electronics Research and Development Command, Fort Belvoir, VA. Night Vision and Electro-Optics Labs.
Corp. Source Codes: 057568001; 393889
Report No.: DELNV-TR-0019
Mar 81 19p
Languages: English
Journal Announcement: GRAI8120
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A02/MF A01
Country of Publication: United States
A study was conducted in which the effects of bits per pixel reductions on target detection and recognition were measured. A hybrid DCT/DPCM compression algorithm was used to manipulate the bit-per-pixel reduction **rate** . The **algorithm** was implemented in the form of a software simulation package on a general-purpose minicomputer facility. Using this facility, real- **time** imagery was reduced from analog to 8- and 2-bit-per-pixel levels at 1-frame-per-second update **rates** . Observers were asked to detect and recognize targets located in the imagery. Average detection and recognition slant ranges were calculated for each target and compression level. No significant differences in performance were noted due to the **different** compression **levels** . (Author)
Descriptors: Image processing; * **Data compression** ; *Video signals; Pulse code modulation; Target detection; Target recognition; Slant range; Bandwidth; Remotely piloted vehicles; Resolution; Discrete fourier transform; Human factors engineering; Visual perception
Identifiers: Pixels; Discrete cosine transform; NTISDODXA; NTISDODXA
Section Headings: 95D (Biomedical Technology and Human Factors Engineering--Human Factors Engineering); 62F (Computers, Control, and Information Theory--Pattern Recognition and Image Processing)

13/5/34 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management

00912133 I95079311259
Region-based video coding using mathematical morphology
(Bereichsbasierte Videocodierung mit Hilfe der mathematischen Morphologie)
Salembier, P; Torres, L; Meyer, F; Chuang Gu
Dept. of Signal Theory, Polytech. Univ. of Catalonia, Barcelona, Spain
Proceedings of the IEEE, v83, n6, pp843-857, 1995
Document type: journal article Language: English
Record type: Abstract
ISSN: 0018-9219

ABSTRACT:
This paper presents a region-based coding algorithm for video sequences. The coding approach involves a **time** -recursive segmentation relying on the pixels homogeneity, a region-based motion estimation, and motion compensated contour and texture coding. This algorithm is mainly devoted to very low bit **rate** video coding applications. One of the important features of the approach is that no assumption is made about the sequence content. Moreover the algorithm structure leads to a scalable coding process giving **various** **levels** of quality and bit **rates** . The coding as well as the segmentation are controlled to regulate the bit stream. Finally, the interest of morphological tools in the content of region-based coding is extensively reviewed.

DESCRIPTORS: IMAGE SEQUENCES; IMAGE CODING; IMAGE SEGMENTATION; SURFACE STRUCTURE; MORPHOLOGY; MOTION ANALYSIS; **DATA** **COMPRESSION** ; ALGORITHM; IMAGE ELEMENTS; **DATA** SIGNALLING **RATE** ; FRAME TRANSMISSION; IMAGE TEXTURE ; MATHEMATICAL MORPHOLOGY; MOTION COMPENSATION; MOTION ESTIMATION; VIDEO CODING
IDENTIFIERS: RECURSIVE FUNCTIONS; REGION BASED VIDEO CODING; CODING **ALGORITHM** ; VIDEO SEQUENCES; **TIME** RECURSIVE SEGMENTATION; PIXELS HOMOGENEITY; REGION BASED MOTION ESTIMATION; MOTION COMPENSATED CONTOUR; TEXTURE CODING; VERY LOW BIT **RATE** ; BIT STREAM; Bildfolgecodierung; Algorithmus

```
Set     Items   Description
S1    3460150   BACKUP? OR BACK?()(UP OR UPS) OR ZIP OR ZIPS OR ZIPPING OR
            ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS? OR PKZIP? OR
             PKUNZIP? OR UNZIP? OR REDUC?
S2     100373   S1(3N)(FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJEC-
            T?)
S3    2629455   RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC?
             OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4    4516155   SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATI-
            ON? OR RESOURCE?
S5     545650   POINTER? OR LINK? OR VIRTUAL()(FILE? OR OBJECT?)
S6      13199   S2 AND S3
S7       6240   S6 AND S4
S8        302   S7 AND S5
S9      63253   S3(2N)(MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VA-
            RIOUS OR VARIET?)
S10        22   S8 AND S9
S11       267   S7 AND S9
S12        32   S11 AND IC=G06F-015?
S13        11   S11 AND IC=G06F-012?
S14        62   S10 OR S12 OR S13
S15        49   S14 AND IC=G06F?
S16        45   S15 NOT AD=20001016:20021016
S17        45   S16 NOT AD=20021016:20040510
S18     77274   (CALCULAT? OR PREDICT? OR FORECAST? OR FORMULA?)(3N)S4
S19         6   S18 AND S8
S20         5   S19 NOT S17
S21         0   S20 AND IC=G06F?
File 347:JAPIO Nov 1976-2003/Dec(Updated 040402)
        (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200428
        (c) 2004  Thomson Derwent
```

20/5/5 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011180767 **Image available**
WPI Acc No: 1997-158692/199715
XRPX Acc No: N97-131026
Image data compression **circuit used in observation appts equipped with artificial satellite - has address** pointer **which outputs** pointer **value for switching, setting of variable length code corresponding to image block to be encoded**
Patent Assignee: MITSUBISHI ELECTRIC CORP (MITQ)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8289304	A	19961101	JP 9590760	A	19950417	199715	B

Priority Applications (No Type Date): JP 9590760 A 19950417
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8289304	A		11	H04N-007/32	

Abstract (Basic): JP 8289304 A

The circuit performs **data compression** by entropy encoding, using the variable length code which is set up according to the error probability obtained from the brightness **level** prediction value of each pixel of image to be coded. The input image data (1) and the image data delayed by one pixel **time** by a delay part (2) are fed to a differential part (4) which outputs differential image data (5). A code memory (6) which stores variable length codes outputs a **data compression** code corresponding to the input differential data and based on the address specified by an address **pointer** (22). A second memory (14) stores the length of the output **data compression** code. A frame counter (10) forms a fixed frame **timing** and a formatter (12) adds a synchronizing signal to the serial data from a serial-parallel converter (8), according to the frame **timing** and outputs a transmission image frame.

An image divider (16) to which the frame **timing** is input, divides the input image into blocks each consisting of predefined number of pixels. A counter (18) counts the frequency of a error from the prediction value of brightness **level** of each pixel. A distribution estimator (20) selects an error distribution pattern from multiple patterns, based on the counter output. The encoded image block and its length is stored into the higher order address of the area code memory and second memory, respectively, in response to the output result of the estimator. The address **pointer** forms a **pointer** value, which switches the setting of variable length code

USE/ADVANTAGE - For observing earth's surface, sea surface. Changes code setting according to transmitting image and performs efficient encoding. Improves compression **rate** and precision of **prediction** . Avoids complicated processing during receiving and processing encoded data.

Dwg.1/12
Title Terms: IMAGE; DATA; COMPRESS; CIRCUIT; OBSERVE; APPARATUS; EQUIP; ARTIFICIAL; SATELLITE; ADDRESS; POINT; OUTPUT; POINT; VALUE; SWITCH; SET; VARIABLE; LENGTH; CODE; CORRESPOND; IMAGE; BLOCK; ENCODE
Derwent Class: Q25; S02; U21; W04; W06
International Patent Class (Main): H04N-007/32
International Patent Class (Additional): B64G-001/66; H03M-007/42
File Segment: EPI; EngPI